Massachusetts Environmental Policy Act (MEPA) Greenhouse Gas (GHG) Emissions Policy and Protocol Overview

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MEPA

- Massachusetts Environmental Policy Act, *M.G.L. Chapter 30, Section 61:*

  The Commonwealth "… shall review, evaluate, and determine the impact on the natural environment of all works, projects or activities conducted by them and shall use all practicable means and measures to minimize **damage to the environment**".

- MEPA jurisdiction is predicated on presence of an Agency Action as defined in the MEPA regulations (301 CMR 11.00)

MEPA

- Coordinated state agency and public review of projects
- MEPA requires proponents to:
  - Study the environmental consequences of their actions
  - Take all feasible measures to avoid, minimize, and mitigate Damage to the Environment
- EIR is the primary mechanism for information collection and review, and development of mitigation measures
- MEPA review is <u>not</u> a permitting process

MEPA and GHGs

– Greenhouse Gas Emissions Policy and Protocol:

"…'damage to the environment' as used in MEPA includes the emission of greenhouse gases caused by Projects subject to MEPA review."

- ✓GHG Policy issued in draft form in 2007
- ✓Final Effective Date of the Policy October 31, 2007
- ✓Minor revisions to the Policy effective June 30, 2008

MEPA and GHGs

- Current Policy applies to projects where:

- Environmental Impact Report (EIR) required

  AND

- One or more of the following apply:
  - Where MEPA has full scope jurisdiction as defined at 301 CMR 11.01(2)(a)(2) or equivalent full scope jurisdiction over the project as defined at 11.01(2)(a)(3)
  - Privately funded, but Air Quality Permit required from DEP
  - Privately funded, but Vehicular Access Permit required from MassHighway

(Projects with minimal emissions exempted from the Policy)

MEPA and GHGs

- Global Warming Solutions Act of 2008
  - Chapter 298 of the Acts of 2008
  - Effective date November 5, 2008
- Section 7 of the Act amends Section 61 of Chapter 30 of the General Laws to provide that:
  - In considering and issuing permits, licenses and other administrative approvals and decisions, the respective agency, department, board, commission or authority shall also consider reasonably foreseeable climate change impacts, including additional greenhouse gas emissions, and effects, such as predicted sea level rise.

MEPA and GHGs

- GHGs now jurisdictional to all state permits and other agency actions
- GHG Policy and Protocol will be revised as of **February, 2009** to apply to all projects that require an EIR
  - (projects with minimal emissions still exempted)
- Stakeholder group will consider potential revisions to the policy in 2009 and consider codifying policy in the MEPA regulations

How the Policy works…

- Requires consideration of feasible measures to “avoid, minimize or mitigate” GHG emissions, as required by MEPA statute

- Requires quantification of:
  - Emissions
  - Impact of Mitigation on Emissions

How the Policy works…

– What It Does Not Do…

✓Create new thresholds for review

✓Create numerical limits on GHG emissions

✓Create numerical targets on GHG reductions

✓Expect absolutely accurate projections

– Commitments to emissions-reduction mitigation to be enforceable through Section 61 Findings and self-certification requirements

– At current time, analysis will focus primarily on CO2

How the Policy works…

- Direct mitigation prioritized over off-site measures
- Offsets should have local or regional benefits, must be verifiable and enforceable
- MEPA will consider opt out requests on a case-by-case basis; Proponents must commit in advance to highly exceptional measures

How the Policy works…

– Categories of emissions:

- Direct emissions from stationary sources i.e., boilers, heaters, combustion turbines, generators, etc.
- Indirect emissions from energy consumption i.e., purchase and consumption of electricity, steam, or cooling
- Indirect emissions from transportation i.e., travel by employees, vendors, customers and others
- Not required to analyze construction period emissions

Transportation Emissions

– To calculate transportation-related emissions:

- Establish a baseline of projected new trips using standard EEA/EOT TIA methodology and ITE trip generation rates
- Calculate Vehicle Miles Traveled (VMT) for weekday and weekend conditions
- Calculate annual VMT:

  (260 x weekday VMT) + (105 x weekend VMT)
- Use EPA MOBILE 6.2 CO_2 emission factors to calculate total CO_2 emissions

Mitigation Measures

- Trip reduction/Transportation Demand Management (TDM)
- EPA COMMUTER model

  http://www.epa.gov/oms/stateresources/policy/pag_transp.htm
- Work Trip Reduction Model
- EOT Congestion Mitigation and Air Quality (CMAQ) Worksheets – transit measures

TDM Measures*

- Siting and project design: Transit Oriented Development (TOD), MA Sustainable Development Principles
- Transportation Management Associations (TMAs)
- Purchase alternative fuel/fuel efficient vehicles for fleet
- Provide new transit service or support extensions of existing service
- Limit parking to meet but not exceed capacity
- Subsidize transit passes for employees
- Reduce employee trips through alternative work schedules, or telecommuting
- Design site with good pedestrian access
- Bicycle storage and showers/changing rooms
- No-idling truck zones at loading areas

*Full list included as appendix to GHG Policy

TDM Challenges

- Significant transportation-related GHG reductions difficult to achieve without mass transit options
- Reluctance towards adoption of measures to encourage use of transit options when available (landlord vs. tenant)
- MEPA plays limited role with respect to siting

Additional Information

– MEPA Website: http://mass.gov/envir/mepa

- General MEPA Info
- GHG Policy & Protocol, current and revised (February 2009 version)
- Response to Comments on Policy & Protocol

- Questions about Policy & Protocol:

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